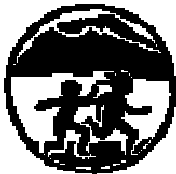


The Vac Scene®

Kris Barnes, MN, RN, Editor



A bi-monthly newsletter for
immunization providers, from
Public Health - Seattle & King
County (PHSKC). For back
issues, visit our website:
<http://www.metrokc.gov/health>



PRSR STD
U.S. Postage
PAID
Seattle, WA
Permit No.1775

Vol. 9, No.5

September/October 2003

Available in alternate formats

In this issue:

- First Confirmed Influenza Cases in Washington State
- Hepatitis B Dose Increases at Birth Hospital
- Vaccines for Children (VFC) Program Update
- Risk Communication: Key to Good Care
- Danish Studies: No Link between Thimerosal and Autism
- Predictors of Age-Appropriate Receipt of DTaP Dose 4
- AAP Policy Strategies for Improving Immunization Rates
- Outpatient Transmission of Hepatitis B and C
- Hepatitis B Dose Different in 1991
- Immunization Resources

FIRST CONFIRMED INFLUENZA CASES IN WASHINGTON STATE

It may be an earlier and more severe flu season than the past few years. Washington State has already reported its first cases of influenza. There have been three A(H3N2) isolates culture-confirmed at the WA state public health laboratory, two from Whitman County (WSU) and one from Franklin County. Two King County cases and one Pierce County case have been reported positive by DFA and are being sent to the WA DOH laboratory for confirmation by culture.

Health care workers should be vaccinated to help protect the high-risk patients for whom they provide care. Others who are recommended to receive flu shot are people at risk of complications if they get influenza (e.g. those over 50 or are immune compromised), along with adults and children that live, work, or may come in contact with people at high risk.

A flu shot is recommended for healthy children 6-23 months of age and for children age six months through 18 years who have high risk medical conditions. Taped information about influenza and influenza vaccine may be heard by dialing 206-296-4949 and viewed at <http://www.metrokc.gov/health/immunization/fluseason.htm>

ADMINISTRATION OF HEPATITIS B VACCINE INCREASES AT BIRTH HOSPITALS

Public Health - Seattle & King County is greatly interested in promoting the use of the first dose of hepatitis B vaccine in the birth setting. The Advisory Committee on Immunization Practice (ACIP), the American Academy of Pediatrics (AAP), and the American Academy of Family Physicians (AAFP) recommend this initial vaccination. Before hepatitis B vaccine was recommended for all children in 1991, approximately 30,000 infants and children each year became infected.

As shown in the table below, we have seen a rise in rates of coverage for birth dose hepatitis B vaccine since 1999.

Hepatitis B Dose Received at Seven Birth Hospitals

in King County	1998	1999	2000	2001	2002
Birth doses	8,282	7,495	9,315	12,392	13,812
Total births *	17,118	17,551	18,268	18,059	18,746
% Vaccinated	48%	43%	51%	69%	74%

* = Total births at hospitals enrolled in the King County VFC Program

Note: King County VFC Program statistics are for seven hospitals; most, but not all King County hospitals participate in the program, and one other receives state-supplied vaccines directly from the Washington State Department of Health, rather than through King County VFC Program.

In 1999, there was a gap in availability of Hepatitis B vaccine due to a change in formulation that removed the preservative thimerosal from the vaccine. Many parents were concerned that the possibility of exposure to mercury via thimerosal may have been a contributing factor in the rise of the number of children diagnosed with autism in the 1990's.

Since the change to thimerosal-free hepatitis B vaccine, there has been an increase in the percentage of babies receiving the birth dose at area hospitals, from 43% in 1999 to 74% in 2002, and an estimated 80% in 2003. Individual hospitals were variously affected by thimerosal fears. In 1999, the year of lowest coverage for most hospitals, the range between hospitals went as low as 24% and as high as 94%. By 2000, the majority of hospitals had returned to or exceeded immunization levels seen before the controversy; the hospital ranked lowest in coverage in 2000 now ranks first with a 99% coverage rate, while others have shown a slower growth in uptake.

Thimerosal is made of thiosalicylic acid and a form of mercury called ethylmercury, and is quickly eliminated from the body through the urine. More information is known about methylmercury because this form of mercury accumulates in the body and remains bound to body tissues for longer periods of time. Federal safety standards for mercury are based on studies performed on methylmercury.

There has been a public health effort to reduce exposure to mercury from all sources. As a precautionary measure, in July 1999, the AAP, AAFP, and the United States Public Health Service (which includes the Food & Drug Administration and the Centers for Disease Control and Prevention) began working to remove thimerosal from vaccines. By early 2001, vaccine manufacturers had reformulated or repackaged vaccines, usually in single-dose vials; however, trace amounts remain in some vaccines from the manufacturing process (1/3,000th the amount formerly used).

There is a success story related to hepatitis B vaccination. The national 1998 birth cohort can expect at least 2,700 fewer deaths from chronic liver disease as it grows to adulthood (Armstrong, et al, 2001*). Public health looks to our community's practitioners for their continued support of the hepatitis B vaccine series.

*Armstrong G, Mast E, Wojczynski M, Margolis H. Childhood Hepatitis B Virus Infections in the United States Before Hepatitis B Immunization. *Pediatrics*. 2001; 108: 1123-1128.

VACCINES FOR CHILDREN (VFC) PROGRAM UPDATE

Vaccine Inventory

The Vaccines For Children Program is moving over to a new data collection system developed by the Washington State Department of Health. This new system collects vaccine dose information by lot number.

VFC participants can help by clearly indicating the number of doses counted at the end of the month for each lot number. For example, when you have two different lot numbers for the same vaccine, list them separately as in: 41 (1234X) and 20 (1299X) rather than just the total of 61 doses. Because the Usage Report form can get a bit crowded, we have developed it as a Word document that can be emailed to you. You can then use the computer to type in lot # information, and email or fax the form to VFC.

In addition to the Usage Report form, we have the Vaccine Request form, Varivax Order form, and the Vaccine Return form available as Word documents. Just email darren.robertson@metrokc.gov to receive these files.

Broadcast Faxes/Email

With over 300 health care providers participating in the King County VFC Program, the most efficient means of communication is the broadcast fax. These faxes contain “breaking news”, such as flu vaccine availability, vaccine shortages and other important information. **For example, Broadcast Fax #6 was sent on Sept 24th and Broadcast Fax #7 sent on Oct 6th; both included very important flu vaccine information.**

If you are not receiving the broadcast faxes, please contact Ricky Robles at (206) 296-4774, or email him at richard.robles@metrokc.gov and your name can be added to the list. It helps to be sure that people whose job it is to check the fax machine know that anything related to the VFC Program should be directed to you. There is also the option of joining the VFC Email Group by sending your email address to darren.robertson@metrokc.gov.

RISK COMMUNICATION: KEY TO GOOD CARE

According to an article in the *American Medical News* (October 20, 2003), the British experience of declining MMR vaccine use and escalating rate of measles is an interesting case study of risk communication gone awry.

A 1998 Wakefield report in *The Lancet* suggesting a link between autism and MMR vaccine, is thought to have fueled parents fears about autism which precipitated the current drop in immunization rate. *The Lancet* study has since been refuted by several subsequent studies, yet the country struggles with disease outbreaks and inadequate vaccine coverage.

In response to the continuing challenge of communicating both benefit and risk in a variety of health care situations, the majority of the September 27th issue of the *British Medical Journal* (BMJ), is dedicated to the topic of risk communication.

Administering vaccinations is a practice area in which health care providers need to have good risk communication skills. It is suggested that for varying reasons, we humans don’t always think rationally about risk. For example, the risk of an adverse reaction may seem more real even if it is less likely than the risk of catching a disease, for example, measles. The vaccine takes on a greater threat as people move further away from real-life experiences with the disease. To access all of the articles in the BMJ go to: <http://bmj.bmjournals.com/content/vol327/issue7417/>

NO LINK BETWEEN THIMEROSAL AND AUTISM FOUND IN TWO DANISH STUDIES

It has been suggested that the removal of thimerosal from all vaccines would lead to a decrease in autism rates. However, a group of Danish researchers found that, **in spite of the removal of thimerosal in 1992**, the rate of new cases of autism continued to rise in Denmark through 1999. The October, 2003 issue of *Infectious Diseases in Children* provides a review of the Danish study that appears in the September, 2003 *Pediatrics*.

In another large Danish study (October 1st *JAMA*), researchers evaluated a population-based cohort to determine whether the risk of autism and other autism-related disorders increased with thimerosal containing vaccination. Hviid and colleagues found no evidence of an association between thimerosal-containing vaccine and autism in children who received thimerosal-containing vaccine, compared with children who received the same vaccine formulated *without* thimerosal. Furthermore, there was no indication of a dose-response association between autism and the amount of ethylmercury received through thimerosal.

To read the review in *Infectious Diseases in Children*, go to: <http://www.idinchildren.com/200310/frameset.asp?article=autism.asp>
The citation for the complete article, “Thimerosal and Occurrence of Autism: Negative Ecological Evidence From Danish Population-Based Data” is:
Madsen, et al. *Pediatrics*. 2003; 112: 604-606.

PREDICTORS OF AGE-APPROPRIATE RECEIPT OF DTaP DOSE 4

Dose 4 of DTaP (appropriately administered between 15-18 months) is the most frequently missed vaccine for children who are not adequately immunized. Health care providers can implement a process that identifies children at risk for either missing the fourth DTaP dose or receiving it late by assessing timeliness of receipt of DTaP Dose 3, according to a recent article in the *American Journal of Preventive Medicine* 2003:25(1). **The use of a reminder/recall system** is one of the clinical prevention efforts recommended to help ensure that children appropriately complete the DTaP series.

AAP POLICY SUGGESTS STRATEGIES FOR IMPROVING IMMUNIZATION RATES

“Increasing Immunization Coverage”, a new American Academy of Pediatricians policy, recommends that pediatricians and other health professionals caring for children take new steps to improve child immunization rates. Printed in the October issue of *Pediatrics* (114: 4), the new policy includes research-based recommendations that include: using prompts, such as chart flags, during office visits to remind parents and staff about needed immunizations, and having standing orders to improve their practices’ effectiveness in immunizing children.

With the implementation of the VFC Program and other changes in vaccine financing, there has been a dramatic shift in vaccine delivery away from public health clinics to primary care settings which, in King County, administer 95% of all childhood vaccines, up from just 73% 10 years ago. Therefore, effective and timely administration of childhood vaccines rests with practicing pediatricians and other primary care clinicians. To access a copy of the policy statement from the AAP website, go to: www.aap.org/policy/s060014.html

CDC REPORTS TRANSMISSION OF HEPATITIS B AND C IN OUTPATIENT SETTINGS

The September 26th issue of “Morbidity and Mortality Weekly Report” summarizes the investigation of four outbreaks of hepatitis B and hepatitis C infections that occurred in outpatient health-care settings during 2000-2002. The investigation of each outbreak suggested that unsafe injection practices, primarily reuse of syringes and needles or *contamination of multiple-dose medication vials*, led to patient-to-patient transmission. To prevent transmission of bloodborne pathogens, all health-care workers should adhere to recommended standard precautions and infection-control principles, including safe injection practice and appropriate aseptic techniques. To obtain the complete text of the article online, go to: www.cdc.gov/mmwrhtml/mm5238a1.html

HEPATITIS B DOSE DIFFERENT IN 1991

Does one give 0.25ml Recombivax hepatitis B vaccine to a child under 11 years of age? That dose would be considered inadequate according to our 2003 dosing guidelines. However, that dose would *not* be considered inadequate if you were evaluating the vaccine record of a child who was immunized with the Recombivax pediatric brown-top vaccine in 1991. This is an acceptable dose, and there is no need to repeat it. Questions? Call Public Health at (206) 296-4774 and ask to speak with an Immunization Nurse.

IMMUNIZATION RESOURCES

Influenza Season Tool Kit

In conjunction with National Adult Immunization Awareness Week, the CDC has introduced “Immunize Now”, a tool kit designed to assist doctors and nurses in minimizing staff time and maximizing patient care during their influenza vaccination efforts. The kit highlights new developments in influenza vaccination, contains bilingual patient education materials and is available for download from the CDC website at: www.cdc.gov/nip/flu/providerkit.htm